

PTO/SB/21 (6-98)
Approved for use through 09/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Typed or printed name Dennis A Tramaloni

Application Number 10/037,064

Filing Date November 7, 2001

First Named Inventor Friederike Zahm

Group Art Unit 1617

Examiner Name Jiang, Shaojia A.

Confirmation Number 6197

ENCLOSURES (check all that apply)		
	Assignment Papers	After Allowance Communication
Fee Transmittal Form	(for an Application)	to Group
Fee Attached	Drawing(s)	Appeal Communication to Board of Appeals and Interferences
Amendment / Response	Licensing-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
After Final	Petition Routing Slip (PTO/SB/69) and Accompanying Petition	Proprietary Information
Affidavits/declaration(s)	Petition to Convert to a Provisional Application	Status Letter
Extension of Time Request	Power of Attorney, Revocation Change of Correspondence Address	Additional Enclosure(s) (please identify below):
Express Abandonment Request	Terminal Disclaimer	Fee Sheet; PTO 1449 with References; Australian Patent
Cxpress Abandonnent Nequest	Small Entity Statement	Office Action; and Post Card.
Information Disclosure Statemen	Request for Refund	
Certified Copy of Priority	Request for Refund	
Document(s)	Remarks	
Response to Missing Parts/ Incomplete Application		
Response to Missing		
Parts under 37 CFR 1.52 or 1.53		
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm Dennis P. Tramal	oni	
or Individual name		
A		
Signature DA TO		
Date April 10, 2003	,	

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Date

April 10, 2003

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail on the

date shown below in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231:

Signature





# PATENT APPLICATION

In repatent application

Inventors Friederike Zahm, et al.

Serial No.: 10/037,064

Filed: November 7, 2001

Hoffmann-La Roche Inc. 340 Kingsland Street Nutley, NJ 07110 April 10, 2003

For: METHOD OF TREATING HEPATITIS C INFECTION

# REQUEST TO CHARGE DEPOSIT ACCOUNT

Commissioner for Patents Washington, D.C. 20231

Sir:

Transmitted herewith is an SUPPLEMENTAL INFORMATION DISCLOSURE **STATEMENT** in the above-identified application.

- $\mathbf{X}$ Please charge my Deposit Account No. 08-2525 in the amount of \$180.00 which is the fee in connection with the filing of the enclosed paper.
- $\underline{\mathbf{X}}$ The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 08-2525.
- This sheet is provided in duplicate. <u>X</u>

Attorney for Applicant Dennis P. Tramaloni

(Reg. No. 28,542)

Telephone: (973) 235-4475 Telefax: (973) 235-2363

129440

Discovery House, Phillip ACT 2606
PO Box 200, Woden ACT 2606
Australia
Phone +61 -2 6283 2999
Facsimile +61 -2 6283 7999
Internet http://www.ipaustralia.gov.au
ABN 38 113 072 755

28 November 2002

Shahnaz Irani SPRUSON & FERGUSON GPO Box 3898 SYDNEY NSW 2001

Your Ref: 532290:SSI

Examiner's report no. 2 on patent application no. 45033/99 by F.HOFFMANN-LA ROCHE AG

Last proposed amendment no. 2

Dear Madam/Sir,

Thank you for the reply of 20 November 2002 to the last report. My report is based on the specification as if amended by the statement of proposed amendments filed with that reply and dated the same. I have considered it and believe that there are lawful grounds of objection to the application as proposed to be amended. These grounds of objection are:

- 5. Objections 2 and 3 are maintained. The claims are not fairly based on the invention described in the description. The attorney has submitted that the invention resides in the combination therapy of PEG-IFN-α conjugate and Ribavirin, and that the PEG-IFN-α dose can be administered during the same or different period of time that the patient receives dosage of Ribavirin. It is understood that PEG-IFN-α may be administered at different times to Ribavirin, however the invention resides in a synergistic effective amount of both compounds being within the body to treat chronic Hepatitis C infection. This is supported by the attorney's submissions where it is stated a synergistic effect is seen on the table on page 7, the synergistic effect is established where a synergistic effective amount of each compound is present in the body. As currently drafted the claim encompasses the individual use of each compound, and is not limited to the use of each compound where there is a synergistic effective amount of each compound. As the claims encompass the individual use of each compound, the claims are not fairly based on the invention described in the description.
- 6. The application is not for a manner of new manufacture within the meaning of Sub-section 18(1) of the Patents Act. In claims 9,15 and dependent claims all that is defined is a collocation of known components. I do not see any new or improved result arising from any working interrelationship between these components. As currently drafted the claim encompasses the individual components with no synergistic relationship between them.
- 7. Claims 9,15 and dependent claims lacks clarity. It is unclear if the claim is directed towards a collocation or a method of using the collocation.
- 8. Claim 9,15 and dependent claims are not novel and do not involve an inventive step when compared to the following prior art documents:

, a. Monkarsh SP et al, A. Clochem, 1997, 247, pages 434-440. The ument disloses PEG-IFN-α. - C |

b. PUBMED ABSTRACT Accession Number: 8681488; Nieforth KA at al, Clin Pharmacol Ther, Jun 1996, 59(6), pages 636-46. This document disloses PEG-IFN-α.

c. PUBMED ABSTRACT Accession Number: 9326177; Telfer PT et al, Br J Haematol, Sept 1997, 98(4) pages 850-5. This document discloses ribavirin.

d. PUBMED ABSTRACT Accession Number 11322259; Hayden FG et al, Antivi Ther, Jan 1996, 1(1) pages 51-6. This document discloses ribavirin. — C. 13

As currently drafted the claim encompasses the individual components with no synergistic relationship between them. Furthermore the claims merely have to be suitable for use to treat chronic Hepatitis C infection and not limited to "when used".

9. The invention defined in the claims does not involve an inventive step when compared with the following the prior art document: PUBMED ABSTRACT Accession Number: 9326177; Telfer PT et al, Br J Haematol, Sept 1997, 98(4) pages 850-5. This document discloses the use of combination therapy of chronic Hepatitis C using interferon-α and ribavirin. This document is related to a similar problem to the applicant's problem. The problem in the current application is to provide a treatment for chronic Hepatitis C. It is well known that conjugating cytokines with PEG improves cytokine stability. Therefore a person skilled in the art would be influenced to use PEG-IFN-α in combination with ribavirin to treat chronic Hepatitis C. For this reason a person skilled in the art would directly and without difficulty by routine steps, arrive at a solution which is the same as the claimed solution, and therefore the claimed invention lacks an inventive step.

NOTE: I apologise for introducing new citations at this stage of examination, however these were found when searching the newly drafted claims.

You have until 24 September 2003 to overcome all my objection(s) otherwise your application will lapse. You will need to pay a monthly fee for any response you file after 12 months from the date of the first report.

Yours faithfully,

ANTHONY MURFETT

Examiner of Patents, Section B3

Telephone: (02) 6283 2243

Telephone contact: SHUBHRA CHANDRA

Senior Examiner of Patents Telephone: (02) 6283 2264

Principals D C Griffith\* BE(Hons) FIPTA D O'Congor FA S D Williams + -BA LLB(Sya) LLM(Lond) G M Turner J F McCann\* BSc(Hons) PhD FIPTA B M Munday\*
BSc(Hons) DIC PhD DipLaw(SAB) FIPTA A L Freeman + BA LLB(ANU) LLM(UTS) R M Miller\* BE BLegS FIPTA L D Pippard\* BE FIPTA C L Bodkin\*
BSc(Hons) DPhil MBA S D Berggren #\*
BSEE MSEE LLB FIPTA G J Gurr\*
BE(Hons) BAppSc
ME(Res) GradDipBus
GradDipLS FIPTA R D Curnick\* BE FIPTA J M K Afaras \*
BEc LLB G J Skelly \*
BSc LLB DipEd A N Blattman\*
BScAgr(Hons) PhD
GradDipIP FIPTA S Irani BSc(Hons) LLB(Hons) FIPTA M H Pollock \* LLB(Hons) Associates 3 M Clarke 3Sc(Hons) MSc FIPTA = Dela Paz 3E(Hons) MLS C Elliott 3Sc(Hons) MSc GradDipIP FIPTA O J Everard ♦ 3 Juris LLB \_LM (Columbia) M Friedgut 3E Dip Mgt GradDipLS E I Genocchio 3E MLS MIP FIPTA 3 P Kane 3Sc LLB VI J Kirov♦ 3A (Hons) LLB < Kortian◆ ⊥B NW Lee Sc MRACI FIPTA W Mackenzie <sup>2</sup> D Massey 3E(Hons) MLS (IPLaw) ) K Myers 3ScAgr(Hons) PhD MLS A E O'Brien 3Sc(Hons) PhD MLS ) M Perkins 3Sc BE(Hons) FIPTA A Power Sc MSc DipLaw (BAB) LM FIPTA Legal Practitioner only also a US Patent Agent echnical Assistants/ C Andrews Tech(Elec) GradDipDesSo J Atichian IE(Hons) MCom Bress ISc(Eng) MSc(Eng) BCom L Caldwell Com LLB Creek ISc DipLaw (SAB) I D Einfeld J Govento S Gripton (Eng(Hons) G D Henning Sc(Eng) MSc AA(Hons) LLB(Hons)

Australia • New Zealand

9 December, 2002

24.12.2002, 52

Level 35, St. Martins Tower, 31 Market Street, Sydney NSW 2000, Australia Mail to: GPO Box 3898, Sydney NSW 2001, Australia Telephone: +61 2 9207 0777 Facsimile: +61 2 9261 5486 mail@sprusons.com.au www.sprusons.com.au Orientierung US ABN 84 362 252 431 + Ueberprüfg, Ald, IL 532290:SSI

Our Ref

F. Hoffmann-La Roche AG Patent Department (PLP) 124 Grenzacherstrasse CH-4070 Basel Switzerland

Attention: Dr H Kjellsaa-Berger

Dear Hanny

Re: Australian Patent Application No. 45033/99

F. Hoffmann-La Roche AG

Title: Use of PEG-IFN-alpha and Ribavirin for the Treatment of Chronic

Hepatitis C Your Ref: 20107

Due Date: 24 December 2002

A further report has been received from the Australian Patent Office in relation to the above patent application. This report is enclosed for your consideration.

Please note that the nominal deadline for acceptance is 24 December 2002, and the absolute final date for acceptance is 24 September 2003. Monthly extension fees are payable if a response is lodged after the first mentioned date.

#### Items 5 and 6

The Examiner has maintained the second and third objections of his first report in respect of the claims filed at the Australian Patent Office with our response of 15 November 2002. The Examiner has maintained his objection that the claims do not define the invention and are therefore not a manner of new manufacture on the basis that the claims do not define that a synergistic effective amount of each component must be administered in order to treat chronic hepatitis C infection. Accordingly, this objection can be overcome by amending the claims to define that there is a synergistic effective amount of each component present within the body. Please confirm with us that you are happy to make this amendment.

### Items 7 and 8

The Examiner is objecting to claims 9 and 15 which are of the form "X when used....". These objections should be overcome when the claims are amended to define the synergistic relationship between the individual components and we also propose to amend the wording of these claims to clarify that they are limited to treating chronic hepatitis C infection. We also propose to argue against the Examiner's seventh objection, as it is clear that claims 9 and 15 are directed towards the combination therapy of PEG-IFN- $\alpha$  conjugate and Ribavirin when used in treating chronic hepatitis C infections.

> Bitte sofort Literatur im Zedo Associated with

Telephone: +61 2 9207 0888 Facsimile: +61 2 9267 9974 mail@sprusons.com.au www.sprusons.com.au

Telephone: +65 6333 7200 Facsimile: +65 6333 7222 mail@ecms-asia.com www.ecms-asia.com

Sprusons: Solicito F 17 17 2 Ella Cheong Mirandah & Sprusons St. Martins Tower, 111 North Bridge Road, 31 Market Street, Sydney, Australia #22-01 Peninsula Plaza, Singapore Jalan Kampar, 50400 Kuala Lumpur, Malaysia Telephone: +60 3 4043 1593 Facsimile: +60 3 4043 1595 malaysia@ecms-asia.com

Member of FICPI PRUSON&FERGUSON .

B Johnson A MA DipLaw (SAB)

J Mahony Sc BE(Hons)

R Mytton A DipLaw (LPAB)

i D Recchia Sc(Hons) PhD

van Rensburg

Eng(Hons) onsultants R Shanahan Sc(Hons) DipLaw(BAB) IPTA

L Kennedy\*
A LLB

[R:\LIBM]93838.doc:jjp

#### Item 9

The Examiner is arguing that all the claims lack inventive step in light of the prior art document PUBMED ABSTRACT Accession No: 9326177; Telfer PT et al, British Journal of Haematology, September 1997, 98(4), pages 850-855. The Examiner is arguing that this document discloses the use of combination therapy of chronic hepatitis C using interferon-α and ribavirin. The Examiner argues that this document is related to the present problem addressed by the present application. The Examiner argues that it is well known that conjugating cytokines with PEG improves cytokine stability. Accordingly, the Examiner argues that a person skilled in the art would be influenced to use PEG-IFN-α in combination with ribavirin to treat chronic hepatitis C. The Examiner concludes that a person skilled in the art would therefore arrive at the claimed solution by taking routine steps only and therefore the claimed invention lacks an inventive step.

We look forward to receiving your comments concerning this objection.

## Voluntary Amendments

Please advise whether you wish to make any further amendments to the claims (other than those suggested above) when responding to the enclosed Office Action. We advise that new matter can be inserted into the specification, however, that matter cannot be claimed.

We look forward to receiving your instructions prior to 24 March 2003, in order that we may prepare and file a response at the Australian Patent Office and so put this application in order for acceptance. In the meantime, if you have any questions or comments concerning the above, please do not hesitate to contact us.

Our debit note is enclosed for your kind attention.

We remind you that there is a continuing obligation to disclose search results to the Australian Patent Office in respect of searches conducted prior to grant of the Australian patent. Please see our earlier correspondence for details of this obligation. Please also note that a transitional provision, which has recently been amended, extends the initial deadline for disclosing search results to 1 June 2003 if it would otherwise fall before then.

Yours sincerely

SPRUSON & FERGUSON

Encl.



Discovery House, Phillip ACT 2606
PO Box 200, Woden ACT 2606
Australia
Phone +61 -2 6283 2999
Facsimile +61 -2 6283 7999
Internet http://www.ipaustralia.gov.au
ABN 38 113 072 755

28 November 2002

Shahnaz Irani SPRUSON & FERGUSON GPO Box 3898 SYDNEY NSW 2001

Your Ref: 532290:SSI

Examiner's report no. 2 on patent application no. 45033/99 by F.HOFFMANN-LA ROCHE AG

Last proposed amendment no. 2

Dear Madam/Sir,

Thank you for the reply of 20 November 2002 to the last report. My report is based on the specification as if amended by the statement of proposed amendments filed with that reply and dated the same. I have considered it and believe that there are lawful grounds of objection to the application as proposed to be amended. These grounds of objection are:

- 5. Objections 2 and 3 are maintained. The claims are not fairly based on the invention described in the description. The attorney has submitted that the invention resides in the combination therapy of PEG-IFN-α conjugate and Ribavirin, and that the PEG-IFN-α dose can be administered during the same or different period of time that the patient receives dosage of Ribavirin. It is understood that PEG-IFN-α may be administered at different times to Ribavirin, however the invention resides in a synergistic effective amount of both compounds being within the body to treat chronic Hepatitis C infection. This is supported by the attorney's submissions where it is stated a synergistic effect is seen on the table on page 7, the synergistic effect is established where a synergistic effective amount of each compound is present in the body. As currently drafted the claim encompasses the individual use of each compound, and is not limited to the use of each compound where there is a synergistic effective amount of each compound. As the claims encompass the individual use of each compound, the claims are not fairly based on the invention described in the description.
- 6. The application is not for a manner of new manufacture within the meaning of Sub-section 18(1) of the Patents Act. In claims 9,15 and dependent claims all that is defined is a collocation of known components. I do not see any new or improved result arising from any working interrelationship between these components. As currently drafted the claim encompasses the individual components with no synergistic relationship between them.
- 7. Claims 9,15 and dependent claims lacks clarity. It is unclear if the claim is directed towards a collocation or a method of using the collocation.
- 8. Claim 9,15 and dependent claims are not novel and do not involve an inventive step when compared to the following prior art documents:

- Monkarsh SP et al, Anal Biochem, 1997, 247, pages 434-440. This document disloses PEG-IFN- $\alpha$ .
- b. PUBMED ABSTRACT Accession Number: 8681488; Nieforth KA at al, Clin Pharmacol Ther, Jun 1996, 59(6), pages 636-46. This document disloses PEG-IFN-a.
- c. PUBMED ABSTRACT Accession Number: 9326177; Telfer PT et al, Br J Haematol, Sept 1997, 98(4) pages 850-5. This document discloses ribavirin.
- d. PUBMED ABSTRACT Accession Number 11322259; Hayden FG et al, Antivi Ther, Jan 1996, 1(1) pages 51-6. This document discloses ribavirin.

As currently drafted the claim encompasses the individual components with no synergistic relationship between them. Furthermore the claims merely have to be suitable for use to treat chronic Hepatitis C infection and not limited to "when used".

9. The invention defined in the claims does not involve an inventive step when compared with the following the prior art document: PUBMED ABSTRACT Accession Number: 9326177; Telfer PT et al, Br J Haematol, Sept 1997, 98(4) pages 850-5. This document discloses the use of combination therapy of chronic Hepatitis C using interferon-α and ribavirin. This document is related to a similar problem to the applicant's problem. The problem in the current application is to provide a treatment for chronic Hepatitis C. It is well known that conjugating cytokines with PEG improves cytokine stability. Therefore a person skilled in the art would be influenced to use PEG-IFN-α in combination with ribavirin to treat chronic Hepatitis C. For this reason a person skilled in the art would directly and without difficulty by routine steps, arrive at a solution which is the same as the claimed solution, and therefore the claimed invention lacks an inventive step.

NOTE: I apologise for introducing new citations at this stage of examination, however these were found when searching the newly drafted claims.

You have until 24 September 2003 to overcome all my objection(s) otherwise your application will lapse. You will need to pay a monthly fee for any response you file after 12 months from the date of the first report.

Yours faithfully,

ANTHONY MURFETT

Examiner of Patents, Section B3

Telephone: (02) 6283 2243

Telephone contact: SHUBHRA CHANDRA

Senior Examiner of Patents Telephone: (02) 6283 2264